

voyage of Jacques Cartier to New France to 1800, was a period of very slow scientific progress, and the names of those who in any way contributed to botanical work in Canada do not exceed 24. Regarding these the author gives much interesting information, with notices of their work. It is evident that it has taken much time and labor to search out these facts, and the thanks of the antiquarian, as well as the historian and botanist, are due to Professor Penhallow.

AN IMPORTANT contribution to the knowledge of the moss-flora of New Guinea forms the last issued part of the *Bibliotheca botanica*.⁶ The collections on which it was based were made by Bäuerlen in 1885 in the south, by Chalmers and Bridge in the Cloudy Mts. in 1884, and by Lawes in the Astrolabe Range. Eighteen new species are characterized and eight figured on the beautiful plates. An appendix enumerates the Hepaticæ of the same collections, including one new species.

CYPRESS "knees" have long been of special interest to morphologists. Dr. W. P. Wilson found favorable opportunity to study these structures while in Florida. A preliminary notice⁷ describes two modes of formation, (*a*) by growing upward of young roots till they reach the air and then turning downward again, the knee forming at the angle; (*b*) by local outgrowths from the upper surface of old horizontal roots. Similar ærating organs were caused to form on Indian corn by keeping the soil saturated. They were also observed on *Pinus serotina*, *Nyssa aquatica* and *Avicennia nitida*.

OPEN LETTERS.

Flowers and Insects.

I have been much interested in Mr. Robertson's article on Flowers and Insects. Under *Dicentra Cucullaria* he refers to observations of others and myself in regard to the puncturing of the corolla by bees. I am pretty sure that the holes were made by honey-bees, as a large hive is in the next yard to mine, and my flowers constantly visited by its occupants. I have observed the same puncturing this year in my yard and that of Mr. George Hunt. It should be stated, however, that *Dicentra* is not indigenous here, and is only seen in cultivation. In the wild state it may, for all I know, be untouched.

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The National Herbarium.

In the GAZETTE for April an allusion was made to the National Herbarium, which, perhaps, was not sufficiently definite. An arrangement

⁶ GEHEEB, ADELBERT.—Neue Beiträge zur Moosflora Neu-Guinea. *Bibl. bot.*, heft 13. Pp. 12. pl. 8. 4to. Cassel: Theodor Fischer. 1889. M. 10.

⁷ WILSON, WM. P.—The production of ærating organs on the roots of swamp and other plants. *Proc. Acad. Nat. Sci. Phila.* Apr. 2, 1889. 8vo. pp. 3.